

2022 Future Plans ODU

Kathryn Mogatas

Old Dominion University Phytoplankton Analysis Laboratory

VA HAB Taskforce Meeting
Gloucester Point, Virginia

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CAAS Cube

- Purchased by VDH
- Automated ELISA system
- Can multiplex different tests at the same time
- Runs until assays are finished
- Easy training
- Removes some operator error



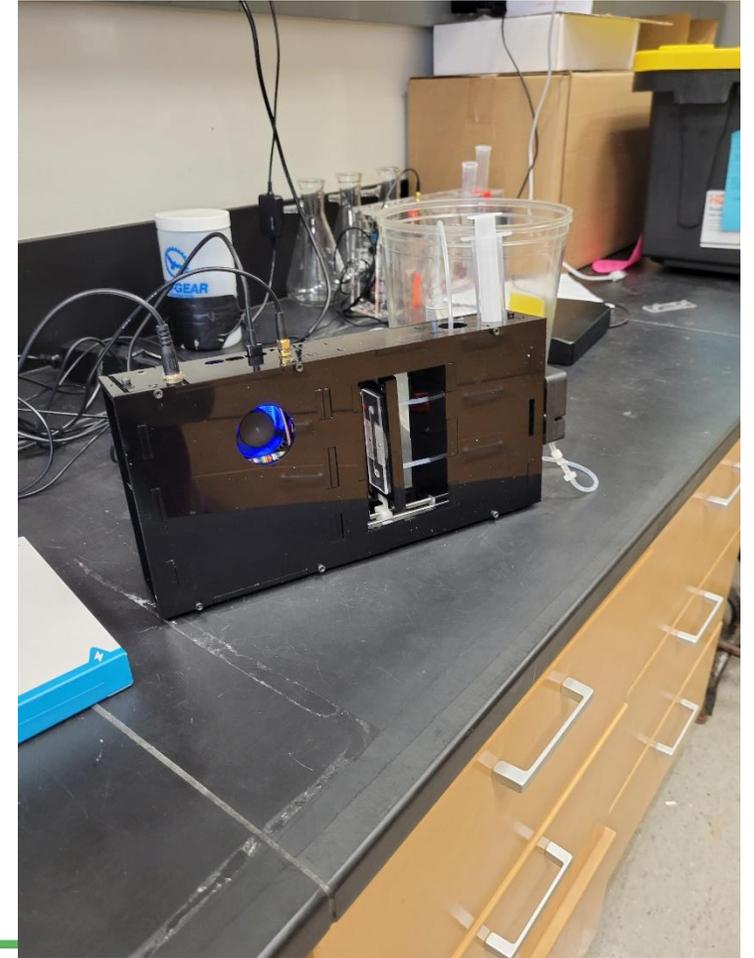
FLOWCAM

- New addition to the lab in 2022 training set to begin in March
- Multiple projects planned
 - Build photo archives of less common species we are still concerned with like *Karenia*
 - Closer examination of different life stages that we may not focus on while counting monitoring samples for example
 - Running culture samples (Eduardo Perez Vega)
 - 2022 DSS samples
- Build a comprehensive digital library from all our different instruments: Flowcam, Planktoscope, IFCB

Planktoscope



- 3 built using 4VA funds by Maci Wigginton
- Allowed us to examine samples year-round while IFCB was not deployed, captured Heterocapsa blooms in winter and Marg blooms during summer!
- Can Planktoscope capture cyanobacteria?
- <https://www.planktoscope.org/>



EcoTaxa 2.6 Project Filtered Filter: Taxo= Anabaenopsis Status= Validated Planktoscope_lakeanna (13, 0, 0, 0 / 13)

Update view & apply filter Select all Display Status Validated 100 100

Taxonomy filter Other filters

Anabaenopsis	13	213
Ankistrodesmus	5	18
Ankistrodesmus falcatus	4	26
Arthrospira	8	237

Anabaenopsis Anabaenopsis

Save pending changes [Ctrl+S] Validate all and move to next page Validate Selection [Ctrl+L] Set Selection Dubious [Ctrl+U] Undo

2022

- Continue VDH & CBP sampling and merging of databases
- Resume HRSD dataflow sampling after COVID hiatus
- Continue sampling at the Lafayette River time series
- Merging of databases
- Continue to train taxonomists using EcoTaxa/FlowCam
- Culture experiments – Eduardo, Mike, Katie
- *Margalefidinium* culture experiment – encystment/exystment (Eduardo)
- *Marg.* – temp/light experiments in cultures ms preparation (Eduardo)
- Seasonal shift from diatoms to dinoflagellates
- *Marg.* mixotrophy with cultures (Katie)
- *Marg.* grazing on them and by them (PURS proposal – undergrad research support; proposal submitted)
- NOAA-OA proposal submitted